



COPY OF PATENT  
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## DECLARATION AND POWER OF ATTORNEY

We, HARRY P. FINKE, GREGORY T. KITKO, MARTY R. MCGHEE, AND DAVID G. SCHALLES, declare:

We are all citizens of the United States of America and residents of the City of Pittsburgh, County of Allegheny, Commonwealth of Pennsylvania; the City of Coraopolis, County of Allegheny, Commonwealth of Pennsylvania; the City of Cornelius, County of Mecklenburg, State of North Carolina; and the City of Jefferson Hills, County of Allegheny, Commonwealth of Pennsylvania, respectively; whose post office addresses are 1306 Old Meadow Road, Pittsburgh, Pennsylvania 15241; 2906 Benjamin Court, Coraopolis, Pennsylvania 15108; 21021 D. Sterling Bay East, Cornelius, North Carolina 28031; and 129 Stevens Ridge Drive, Jefferson Hills, Pennsylvania 15025, respectively.

We believe ourselves to be the original, first, and joint inventors of the improvement in "BURNER FOR NON-SYMMETRICAL COMBUSTION AND METHOD" described and claimed in the patent application which was filed in the United States Patent and Trademark Office on December 28, 2001.

We have reviewed and understand the contents of the specification, including the claims.

That this application in part discloses and claims subject matter disclosed in our earlier filed pending Application Serial No. 09/744,845, filed August 29, 2001, which claims the benefit of United States Provisional Application Serial No. 60/094,607, filed July 30, 1998.

That, as to the subject matter of this application which is common to said earlier application, we do not know and do not believe that the same was ever known or used in the United States before our invention thereof; or patented or described in any printed publication in any country before our invention thereof or more than one year prior to said earlier application; or in public use or on sale in the United States more than one year prior to said earlier application.

That said common subject matter has not been patented or made the subject of an inventor's certificate before the date of said earlier application in any country foreign to the United States on an application filed by us or our legal representatives or assigns more than twelve months prior to said earlier application.

That the first filed application for patent or inventor's certificate on said invention set forth in said earlier application filed by us or our legal representatives or assigns in any country foreign to the United States is: none .

That as to the subject matter of this application which is not common to said earlier application, we do not know and do not believe that the same was ever known or used in the United States before our invention thereof; or patented or described in any printed publication

in any country before our invention or more than one year prior to the date of this application; or in public use or on sale in the United States more than one year prior to the date of this application.

That said subject matter of this application which is not common to said earlier application has not been patented or made the subject of an inventor's certificate in any country foreign to the United States on an application filed by us or our legal representatives or assigns more than twelve months prior to the date of this application.

That the first filed application for patent or inventor's certificate on said invention first set forth in this application filed by us or our legal representatives or assigns in any country foreign to the United States is: none .

We acknowledge our duty to disclose information of which we are aware which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a) including matters as occurred between the filing date of our said earlier application and the filing date of this application.

We declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

We hereby appoint John W. McIlvaine, Registration No. 34,219; William H. Logsdon, Registration No. 22,132; Russell D. Orkin, Registration No. 25,363; David C. Hanson, Registration No. 23,024; Richard L. Byrne, Registration No. 28,498; Frederick B. Ziesenheim, Registration No. 19,438; Kent E. Baldauf, Registration No. 25,826; Barbara E. Johnson, Registration No. 31,198; Paul M. Reznick, Registration No. 33,059; Blynn L. Shideler, Registration No. 35,034; Julie W. Meder, Registration No. 36,216; Lester N. Fortney, Registration No. 38,141; Randall A. Notzen, Registration No. 36,882; James G. Porcelli, Registration No. 33,757; Kent E. Baldauf, Jr., Registration No. 36,082; Christian E. Schuster, Registration No. 43,908; Dean E. Geibel, Registration No. 42,570; Thomas J. Clinton, Registration No. 40,561; Nathan J. Prepelka, Registration No. 43,016; Jessica M. Schroth, Registration No. 47,102; Kirk M. Miles, Registration No. 37,891; and J. Matthew Pritchard, Registration No. 46,228; Darrell E. Williams , whose post-office address is 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, Pennsylvania 15219-1818, Telephone No. 412-471-8815, our attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, to amend the specification, to appeal in case of rejection, as they may deem advisable, to receive the patent when granted and generally to do all matters and things needful in the premises, as fully and to all intents and purposes as we could do.

**All correspondence and telephone calls should be addressed to John W. McIlvaine.**

I hereby subscribe our name to the foregoing specification and claims, declaration and power of attorney.

Inventor \_\_\_\_\_  
Harry P. Finke

Date \_\_\_\_\_

I hereby subscribe our name to the foregoing specification and claims, declaration and power of attorney.

Inventor Gregory T. Kitko  
Gregory T. Kitko

Date 1/15/2002

I hereby subscribe our name to the foregoing specification and claims, declaration and power of attorney.

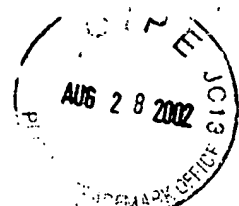
Inventor Marty R. McGhee  
Marty R. McGhee

Date 24 January 2002

I hereby subscribe our name to the foregoing specification and claims, declaration and power of attorney.

Inventor David G. Schalles  
David G. Schalles

Date January 9, 2002



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PATENT, TRADEMARK & COPYRIGHT LAW



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CHRISTIAN E. SCHUSTER  
THOMAS J. CLINTON  
NATHAN J. PREPELKA  
JESSICA M. SCHROTH  
KIRK M. MILES  
J. MATTHEW PRITCHARD IV  
DARRELL E. WILLIAMS  
ALKA A. PATEL  
PHILIP J. FORET

PATENT AGENT  
GARY F. MATZ

March 4, 2002

Mr. Harry P. Finke  
1306 Old Meadow Road  
Pittsburgh, PA 15241

412-221-0959

Re: U.S. Patent Application Serial No. 10/032,803 filed December 28, 2001  
entitled "Burner for Non-Symmetrical Combustion and Method"  
Our File: 011564

Dear Harry:

I hope retirement is treating you well.

I am writing to you regarding Bloom's request that you sign a Declaration and an Assignment for the above patent application. I have read your January 27, 2002 letter, as well as the April 1, 2000 letter agreement and the Assignment which you have already executed on September 21, 1998. The September 21, 1998 Assignment conveyed your rights in the provisional patent application which originated from the above continuation-in-part ("CIP") application. As we understand, you now ask Bloom to pay you on an hourly basis for your review and execution of the CIP. Bloom has asked us whether, indeed, they are obligated to pay you on that basis in order that you would execute the application. Basically, Harry, you have already agreed to sign the Declaration and Assignment with no further compensation from Bloom. When you signed the September 21, 1998 Assignment, you agreed to execute the CIP for the consideration which you acknowledged receiving at that time (and no more). (See paragraphs 3 and 5 of the prior 1998 Assignment, copy enclosed.)

While Bloom (under Jim Johns) may have agreed to modify your Assignment for the Air and Fuel Staged Burner, to apply the April 1, 2000 letter agreement to that Assignment, that modification does not legally carry over to the above patent application.

The language in the 1998 Assignment, stating that these papers will be executed "without expense to us" simply means that Bloom will reimburse you for any out of pocket expenses (such as, in this case, postage or FedEx charges). That does not mean that Bloom must compensate you beyond what you were already being compensated as an employee when you signed the 1998 Assignment.

Mr. Harry P. Finke

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March 4, 2002



Therefore, we reiterate Bloom's earlier request that you now sign and date the Declaration and Power of Attorney, to execute the above patent application.

Your original 1998 Assignment, by its terms, explicitly assigned all continuation-in-part applications on this invention. Since you acknowledged no involvement in the claims related to oxygen use on the current activity, we have determined that we do not require you to review and sign a new Assignment. You have acknowledged no involvement in the only subject matter in the instant application which is new. Your Declaration will only apply to the subject matter of the original application that has been carried over into the CIP application.

Enclosed is a duplicate copy of a Declaration and Power of Attorney, and a self-addressed stamped envelope, for your convenience. Please sign and date the Declaration where indicated and drop it in the mail to us.

Thank you for your cooperation and if you have any questions do not hesitate to give John W. McIlvaine or me a call.

Very truly yours,

   
Russell D. Orkin

RDO/JWMc/ljm  
Enclosures

cc: Mr. David G. Schalles (w/o enclosures)  
Mr. Trevor Dunthorne (w/o enclosures)

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PATENT, TRADEMARK & COPYRIGHT LAW

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PATENT AGENT  
GARY F. MATZ

June 17, 2002

Mr. Harry P. Finke  
1306 Old Meadow Road  
Pittsburgh, PA 15241

Re: U.S. Patent Application Serial No. 10/032,803 filed December 28, 2001  
entitled "Burner for Non-Symmetrical Combustion and Method"  
Our File: 011564

Dear Harry:

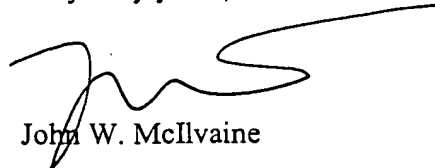
Further to our letter of March 4, 2002, we have not received any response from you to the letter, as of this date. We understand Bloom has heard nothing from you on this matter either.

Although our position remains as stated in our March 4, 2002 letter, in an effort to move this situation along, may we please have your fixed fee quotation for your charges to review and sign the necessary papers and drop them in our self-addressed, stamped envelope?

Once we have your quotation, we will decide whether to proceed on that basis, or to prepare and file the necessary papers to go forward in the application without your signature.

Please respond as soon as possible directly to me. Thank you very much for your cooperation.

Very truly yours,

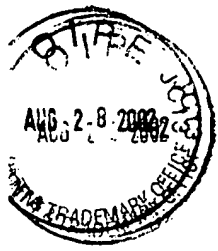


John W. McIlvaine

JWMc/ljm  
Enclosures

cc: Mr. David G. Schalles  
Mr. Trevor Dunthorne  
Russell D. Orkin, Esq.

DGS/FILE

**Harry P. Finke**

1306 Old Meadow Road  
Pittsburgh, PA 15241-3457  
412/221-0959  
harryfinke@adelphia.net

CC: [illegible]  
OFFICE [illegible]

January 27, 2002

Bloom Engineering Co., Inc  
5460 Horning Road  
Pittsburgh, PA 15236

Gentlemen:

With reference to patent applications and other matters, I will cooperate and sign the Declaration and Power of Attorney and the Assignments for previously submitted concepts or documented concepts filed in the attorney's office-Provided that the POA and Assignments be modified as previously marked up. These modifications reflect the letter of agreement for my time and services beyond the period of employment with Bloom.

It takes my valuable time to review and understand the contract documents submitted-and gentlemen this is not for free. I am willing to contribute up to one hour maximum for these reviews. Any involvement beyond one hour shall roll over and include the first hour for billing purposes.

The POA and assignment contracts are not acceptable to me as written. This has been discussed with Russ Orkin. A separate side letter, for each situation, from an authorized officer of Bloom agreeing to and referring to the agreement would be acceptable. This letter would also have to address the fact that my rates have increased 10% above those listed in the April 1, 2000 and signed by James E. Johns.

The separate letter for each situation must reflect the agreement and tie it to and precede the POA and Assignment contract.

It should be noted that I have no involvement in the claims related to the Oxygen use on the current activity.

Sincerely,

ASSIGNMENT

WHEREAS, WE, Harry P. Finke, Martin R. McGhee and Gregory T. Kitko, residing in Pittsburgh, County of Allegheny, Commonwealth of Pennsylvania; Library, County of Allegheny, Commonwealth of Pennsylvania; and North Versailles, County of Allegheny, Commonwealth of Pennsylvania, respectively, have invented certain new and useful improvements in "BURNER FOR NON-SYMMETRICAL COMBUSTION" for which a provisional patent application was filed in the United States Patent and Trademark Office on July 30, 1998 and bears Serial No. 60/094,607;

AND, WHEREAS, Bloom Engineering Company, Inc., a corporation of Pennsylvania, having a place of business at 5460 Horning Road, Pittsburgh, Pennsylvania 15236-2822, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said provisional patent application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to us by said assignee, the receipt of which is hereby acknowledged, we do hereby assign, sell, transfer, and set over unto said assignee the entire right, title and interest in and to said provisional application and the inventions and improvements therein disclosed for the United States and all foreign countries and all regular applications claiming the benefit of said provisional applications, divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said regular applications claiming the benefit of said provisional application and said divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.


We covenant that we are the lawful owners of the said provisional application, and said inventions and improvements therein disclosed, that the same are unencumbered, that no license has been granted to make, use, or sell the said inventions or improvements or any of them, and that we have the full right to make this assignment.

And for the consideration aforesaid, we agree jointly and individually that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all regular, divisional, reissue, continuation, continuation-in-part, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said assignee or by counsel for said assignee, to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned.



This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said assignee.

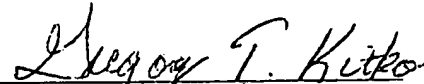
Date Sept 21, 1998

Inventor   
Harry P. Finke

Date 21 September 1998

Inventor   
Martin R. McGhee

Date September 21, 1998

Inventor   
Gregory T. Kitko

ASSIGNMENT

WHEREAS, We, Harry P. Finke, Gregory T. Kitko, Andrew J. Johnson, and John R. Hemmerlin residing in the City of Pittsburgh, County of Allegheny, Commonwealth of Pennsylvania; City of Evansville, County of Vanderburgh, State of Indiana; City of Eighty-Four, County of Washington, Commonwealth of Pennsylvania; and City of Evans City, County of Butler, Commonwealth of Pennsylvania, respectively, have invented certain new and useful improvements entitled "Air and Fuel Staged Burner" described and claimed in United States Patent Application Serial No. 09/738,142, filed December 15, 2000 and in United States Provisional Patent Application Serial No. 60/171,073, filed December 16, 1999 (hereinafter "said applications").


AND, WHEREAS, Bloom Engineering Company, Inc., a corporation of the Commonwealth of Pennsylvania, having a place of business at 5460 Horning Road, Pittsburgh, Pennsylvania 15236-2822, hereinafter called the "assignee", is desirous of acquiring the entire right, title, and interest in and to said applications and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to us by said assignee, the receipt of which is hereby acknowledged, We do hereby assign, sell, transfer, and set over unto said assignee the entire right, title and interest in and to said applications and the inventions and improvements therein disclosed for the United States and all foreign countries and any Letters Patent which may issue therefor in the United States and all foreign countries and all non-provisional patent applications, divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said Letters Patent and any and all divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.

The Commissioner of Patents and Trademarks is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owners of the said applications and the inventions and improvements therein disclosed, that the same are unencumbered, that no license has been granted to make, use, or vend the said inventions or improvements or any of them, and that we have the full right to make this assignment.

And for the consideration aforesaid, we agree that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings,

(1) Compensation and expenses shall be in accordance with Agreement signed April 1, 2000 and transmitted with Toc dated April 10, 2000

  
3/13/01